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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/990,446 | 11/09/2001 | Jihyuk Choi | 3364P059 | 3728 |

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EXAMINER

CHEA, PHILIP J

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2153

DATE MAILED: 10/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/990,446

Applicant(s)

CHOI ET AL.

Examiner

Philip J. Chea

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11/09/01 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is in response to an Amendment filed July 6, 2006. Claims 1-5 are currently pending. Any rejection not set forth below has been overcome by the current Amendment.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Yano et al. (US 6,807,235), herein referred to as Yano.

As per claim 1, Yano discloses a method for recognizing a request for data transmission by a mobile/base station RRC (Radio Resource Control) using a network transfer device, by which the mobile/base station RRC can recognize the request for data transmission using the network transfer device in a state where recognition of the request for data transmission is disabled, the method comprising:

(a) the mobile/base station RRC setting the network transfer device in a suspend state to recognize a request for data transmission from an up/down link (see column 5, lines 38-56);

(b) the network transfer device in the suspend state sending a message to the mobile/base station RRC to inform the mobile station RRC that it recognizes the request for data transmission in the case of recognizing the request for data transmission to an up link, and the network transfer device of the base station in the suspend state sending a message to the base station RRC to inform the mobile station RRC that it recognizes the request for data transmission in the case of recognizing the request for data

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transmission to a down link (see column 5, line 56 – column 6, line 14, and Fig. 3, where network transfer device is capable of recognizing requests for both up and down links);

(c) the mobile/base station RRC recognizing the request for data transmission according to a received message from the network transfer device and transiting to an active state (see column 5, line 56 – column 6, line 14); and

(d) the network transfer device transiting to the active state by the RRC transited to the active state (see column 5, line 56 – column 6, line 14).

As per claim 2, Yano further discloses that the network transfer device comprises an RLC (Radio Link Control) protocol control network of the mobile/base station (see column 2, lines 34-40, i.e. flow control functionalities at the link layer provided by the data processing part).

As per claim 3, Yano further discloses that the network transfer device is a PDCP (Packet Data Convergence Protocol) control network of the mobile/base station (see column 1, lines 7-15, where a mobile communication system of a CDMA method inherently discloses that the network transfer device is a PDCP).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4,5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yano et al. (US 6,807,235), herein referred to as Yano as applied to claim 1 above, and further in view of Baker (US 2001/005298), herein referred to as Baker.

As per claim 4, Yano discloses the base station RRC setting the base station RLC in the suspend state and then setting a base station PDCP in the suspend state (see column 5, lines 38-56).

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Although the system disclosed by Yano shows substantial features of the claimed invention (discussed above), it does not expressly disclose the mobile station RRC setting the mobile station RLC in the suspend state and then setting a base station PDCP in the suspend state.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Yano, as evidenced by Baker.

In an analogous art, Baker discloses a system for providing wireless access to packet data networks, further disclosing in paragraph [0068], that the layer 2 contains the RLC and PDCP).

Given the teaching of Baker, a person having ordinary skill in the art would have readily recognized that Yano discloses suspending layer 2 communications, and that it would be obvious that the layer 2 contain RLC and PDCP. Therefore at the time of the invention, a person skilled in the art would have found it obvious for the base station RRC setting the base station RLC in the suspend state and then setting a base station PDCP in the suspend state; and the mobile station RRC setting the mobile station RLC in the suspend state and then setting a base station PDCP in the suspend state

As per claim 5, Yano in view of Baker further disclose the base station RRC setting a base station RLC in the suspend state and then setting a base station PDCP in the suspend state (see Yano column 5, lines 38-56); and

the mobile station RRC setting a base station RLC in the suspend state (see Yano column 5, lines 38-56). In considering the RLC and the PDCP, Baker discloses in paragraph [0068], that the layer 2 contains the RLC and PDCP. Since Yano discloses suspending layer 2 communications, it would be obvious that the layer 2 contain RLC and PDCP.

Response to Arguments

5. Applicant's arguments filed July 6, 2006 have been fully considered but they are not persuasive.

(A) Applicant contends that Yano does not use state transit messages.

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In considering (A), the Examiner respectfully disagrees. The term message used in the claim language is not clear enough to distinguish the invention over the prior art. Yano shows that state transitions are achieved by watching for a transmission of data (recognizing data) and once detected the processing engine operate continuously. This transition from a suspend state to an active state implies that a message was transmitted and received in order announce the arrival of data. The Examiner invites the applicant to incorporate further details on the specific components and details of the message from the specification (paragraphs [0027 and 0030]) in order to overcome the prior art rejection.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip J. Chea whose telephone number is 571-272-3951. The examiner can normally be reached on M-F 7:00-4:30 (1st Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Burgess can be reached on 571-272-3949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Philip J Chea
Examiner
Art Unit 2153

PJC 9/19/06



GLENN B. BURGESS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

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